# **How Underwater Drones Are Revolutionizing Aquaculture**



Have you ever wondered what's actually going on in your sea cages or fish ponds? Conventional techniques require expensive human divers, murky waters, and guesswork. However, the underwater drones are now revolutionizing the industry by providing fish and prawn farmers with a real-time, crystal-clear view of underwater activity.

These underwater robots are made to see, sense, and support smarter aquaculture, whether you're keeping

prawns in shallow ponds or fish in open water cages.

## See Through Murky Waters — Literally

Fish farming often suffers from poor visibility—algae blooms, dirty water, or nighttime operations can make visual inspections difficult.

But drones like the FIFISH V6 Expert and V-EVO come with:

- 4K ultra-HD cameras that deliver crisp footage and live feeds
- Powerful 10,000-lumen lighting systems that illuminate even the darkest environments
- AI-powered stabilization and vision lock, keeping the focus on moving fish or underwater structures

This allows farmers to monitor feeding behavior, check for signs of disease, or assess infrastructure—even in poor visibility conditions.

### **Underwater Fish Headcount & Behavior Monitoring**

Manual estimation of fish populations is not feasible and takes time. Underwater drones make it fast, visual, and data-driven.

Major advantages are:

- Wide-angle coverage and real-time estimation of accurate populations
- Behavior tracking for measuring feeding reactions, stress indications, or deviation in swimming behavior
- Detection of injuries, dead fish, or inactive areas within the cages or ponds
- Tracking of schooling behaviors and movement between various parts of the farm

This insight enables farmers to improve feed scheduling, density, and harvest planning.

### **Real-Time Water Quality Monitoring**

Knowing your water is crucial to the health of prawns and fish—and underwater drones make it simpler than ever.

High-end models like the FIFISH W6 can be equipped with high-accuracy sensors to:

- Measure pH levels at various points and depths
- Test turbidity to ascertain sediment concentration and water clarity
- Monitor salinity, which is critical for prawn farming in coastal or brackish waters
- Measure dissolved oxygen levels across multiple depths, avoiding stress or die-offs by the masses

These instantaneous readings give farmers an integrated, dynamic image of their water world—without the labor of taking samples manually.

#### **Perfect for Prawn Farming**

Prawn ponds pose particular challenges—shallow water, oxygen variations, and biosecurity threats.

Underwater drones offer solutions by:

- Sailing into shallow corners of ponds for complete visual inspection
- Identifying bottom sludge buildup that causes gas accumulation
- Predator or pest monitoring such as crabs that can enter the inlets of ponds
- Monitoring liner condition and leak or damage detection before they become serious problems

With the combination of visual and sensor information, drones enable prawn farmers to have improved control and minimize losses.

#### More Than a Camera: Modular Add-ons and Custom Tools

XBOOM underwater drones offer far more than video. With modular design and numerous available attachments, these drones can be tailored to your specific aquaculture needs.

Top-selling add-ons are:

- Robotic arms for net inspection, retrieval tasks, and restricted cleaning
- Water samplers that collect samples at precise depths
- Laser scalers for measuring fish size or object size
- Multi-parameter probes for the concurrent measurement of pH, salinity, temperature, and oxygen

And that's only the beginning. Plenty of other accessories and customizations are out there. All add-ons and modules are accessible via XBOOM Utilities, and our support team is waiting to assist you in selecting the proper combination for your farm.

#### Why Choose XBOOM Utilities?

XBOOM Utilities is India's top destination for cutting-edge drone technology, providing a carefully curated set of QYSEA's FIFISH underwater drones specifically for aquaculture and marine research.

Why XBOOM is preferred by professionals:

- All-around training and onboarding support for effortless use
- Tailored advice and pre-configured sets according to farm size and category
- Pan-India service, technical assistance, and post-sales servicing
- Best industry rates for drones, sensors, and accessories

# Get the Tools to Dive Deeper—Only at XBOOM Utilities

Whether you are operating a fish cage system, shrimp ponds, or research tanks, such underwater drones enable you to work more intelligently—with improved visibility, real-time information, and actionable insights.

All these underwater drone solutions—along with their full range of accessories—are available at the best prices with us at XBOOM Utilities. Explore our complete underwater drone collection, talk to our experts, and upgrade your aquaculture operations with confidence.

Visit <u>www.xboom.in</u> to check our underwater drone collection to learn more and get started today.